Cooperatives in the value chain

Storage, distribution, purchasing, customer preferences

Benefits to members
- Financial, non-financial
- Easy to identify, hard to identify
- Farm-level and transfers

Investment
- Returns to members
- Closed vs open co-ops

Competitive conditions and options for expansion
South Texas cotton harvest starts in July and is typically done by the time harvest starts in West Texas.

The cooperative hauls cotton modules from field to gin.

Cottonseed is separated from the lint. Some is marketed on cash markets and some is shipped to the oil mill.

The marketing cooperative provides office support to gins that allows producers to market their cotton bales.

Cotton bales are stored until sold and then shipped to the buyer (usually a merchant). A lot of cotton goes overseas through the port at Long Beach, CA via rail from Houston, TX.

The oil mill removes more lint, cracks the hulls, crushes the kernel, and extracts oil using hexane.

Kernel
- Oil
- Glycerin
- Meal

Hulls
- Roughage

Linters
- Cellulose
- Food Casings
- Rayon
- Esters and Ethers
- Plastics
- Upholstery
- Yarns
- Cotton balls
- Papers
- Films

Merchandisers and textile mills

The cooperative maintains ownership of bales until they are sold. The marketing cooperative operates a marketing pool, and supports electronic marketing used by the industry.
Cotton Value Chain

Farmers produce cotton

Intermediaries process, store, and distribute cotton lint and seed; they buy fiber and oil

Consumers buy end use products: shirts, cheetos

Through cooperatives, farmers own firms that create value at each stage
  ◦ Financial returns
  ◦ Risk
  ◦ Pro-competitive
  ◦ Access to service

Cotton Ginning
Bale Storage
Bale Shipping
Textile and Oil Manufacture
Wholesaling and Retailing
Smith Gin

2018 conditions

Provide ginning and cleaning service to make cotton market-ready

Service quality affects cotton quality; harvest quality also affects cost of service

Ginning volume affects scale economies and associated patronage

Patronage refunds from regional co-ops not allocated to members

Processing pace affects access storage and access to government programs
  ◦ Speed and efficiency
  ◦ Access to labor
Gulf Compress

Centralized storage at multiple facilities

Provides shipping service

Storage allows access to favorable variations in world cotton price – south Texas cotton hits the market first
  ◦ Speed vs. profitability

Storage facilities maintain quality by protecting from storms

Challenges
  ◦ Metro encroachment
  ◦ Age and location of storage
  ◦ Changes in tax laws (land)
VALCO

Process cottonseed into oil, oil meal, hulls, linters; assets for biofuel products available but not used

Owned by farmers and gins

Cross-subsidization of cotton prices by seed product prices

Profits from seed processing distributed as patronage

Provides market access for seed products
  ◦ Changes in Mexican demand for seed
PCCA

Facilitates sales of bales through pools, contracts, and cash arrangements

Marketing expertise; innovation
  ◦ The Seam.com

Shared risk in pooling

Sustained relationships with buyers

Farmers receive quality, sales, and historical data through membership
Questions for study

Smith Gin
- How important is processing speed to providing a weather risk benefit?
- The gin provides free shipping to the processing facility. What does this imply about whether the distant producers need the closer members?
- Gin capacity expands based on the available cotton processing demand. Cotton plantings need gin capacity. How should patronage be managed in this case?

Gulf Compress
- How does this co-op, being federated, show its value to farmers?
  - Value to individual farmer vs. all farmers
  - Challenges of communicating risk management value
- How does technology affect the value of the co-op?
Questions for study

VALCO

- How fast should boards make decisions about expanding into other products?
- Seed quality is affected by weather. What are the prospects for pooling and associated patronage payments?
- Regulation and compliance costs are significant. How would farmer value be affected if these costs were borne in a non-cooperative firm?
Sugar value chain

Farmers produce sugarcane

Intermediaries process, store, and distribute molasses; sugar at raw or finished stages; byproducts

Consumers buy sugar products

Through cooperatives, farmers own firms that create value at each stage
  ◦ Financial returns
  ◦ Risk
  ◦ Pro-competitive
  ◦ Access to service

Seed development
Cane production
Cane milling
Marketing
Wholesaling and Retailing
Rio Grande Valley Sugar Growers Co-op

Closed cooperative; refinery built in 1960s
Processes sugarcane into raw sugar; electricity
Markets raw sugar to processor into refined sugar
Options:
  ◦ Ethanol
  ◦ Raw sugar refining
  ◦ Sweetener production
Buyer is a JV between co-op and IOF
RGVSG – Farm-level benefit

Texas has 4th largest acreage for sugarcane (Florida is #1)

Texas sugarcane season is six months; four in Florida
- Weather, variety, disease, pests

Co-op jointly bears harvest cost
- Coordinated harvest timing
- Direct shipping to processor
- Harvest equipment
- Maintenance of harvest equipment

Seed variety development program
Questions for study

Value of harvest coordination?
Why stop at raw sugar?
Hold up problems?
Edinburgh Citrus Association

Producers own groves and deliver harvest to plant for processing
  ◦ Fresh
  ◦ Juiced

Fruit pricing driven largely by aesthetics (consumer preferences for “pretty fruit”)

Members obligated to deliver (closed co-op)

ECA provides grove management services

Fruit harvested late Oct – early May
ECA Nuances

Only remaining citrus fruit co-op in Texas

Producers seem to be paid by pack-out volume, not quality

Labor a significant issue

ECA is contributing food-grade expertise, marketing labels include Tropicana and “B grade” fruit

Sold juicing plant a few years ago

ECA buys groves to add production “on top of” members’ production
Questions for study

What does grove-longevity suggest about innovation by producers and need for ECA?

Board decisions: sold the juicing plant putting ECA in a precarious situation with Wonderful (who invested in local groves)

Not clear the extent to which producers believe they have control over quality; how does this impact pricing, producer innovation

Service value in maintaining food-grade certification, licensing
How to use in classroom

Short write-ups available upon request

Suitable for Cooperatives course, agribusiness strategy course, supply chain course