Understanding and Responding to the Changing Face of Maryland Agriculture

A Resource for Communities

Governor's Intergovernmental Commission for Agriculture

Project Background

A GICA product

- Goals:
 - Comprehensive Information
 - Broad-based input
- Starting Point
 - Governor's 2010 Ag Forum Survey Results

Agriculture Has Changed





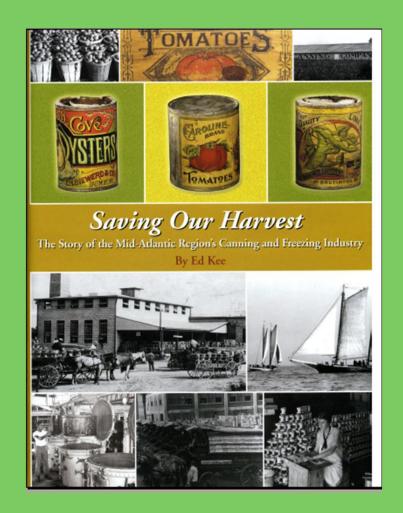
A Historical Perspective



The Silicon Valley of the Food Industry: 1830s to 1950s

1889 – 37% of U.S.canning operations in MD

- 75 million consumers w/in 8 hour drive
- Region was #1 tomato processor in country as late as 1950's



"Get Big or Get Out"

- Infrastructure
 - Irrigation
 - Interstate Highway System
 - Subsidies
- Efficiency
 - Consolidation
 - Cheap Energy
 - Cheap Labor





The Context of Maryland Agriculture: Resilient Farmers, Tough Issues



A Dynamic Economic Engine

- High \$ value/acre
- Wealth Production
 - \$1.8 billion industry
 - \$450 million in exports 2009
 - #7 Broiler producer in U.S.



- Employment and Related Industries
- Resiliency Amidst Change

Top Issues: Environmental Adaptation

- Success in Implementing BMPs
 - First CREP Program in Nation 70,000 acres of buffers
 - Over 500,000 acres of cover crops this year (a record)
- Sustainability as good business
 - Limited, efficient fertilizer application
 - Conservation till to save fuel
 - Cover crops
 - Diversification to limit off-farm inputs
- A Record of Voluntary Success

Top Issues: Environmental Adaptation (con't)

- Achieving TMDLs
 - Will Require Support
 - Increasingly Expensive BMPs
 - Equity in Competition
- Cost-Share and Technical Assistance
 - Capital Investments
- Potential for New Regulations
 - Certainty in business

Top Issues: Loss of Farmland

- Sale for Development
 - Close proximity of new neighbors
- Conflicts with Neighbors
 - Unrealistic Expectations



- Higher Costs for Remaining Farmers
 - Disappearing Market
 - Land costs
 - Options for Manure

Top Issues: Availability of Labor

- H2A Visa program
 - Burdensome
 - Expensive
 - Not used by all



- Workforce Housing
 - Used differentially than residential house, same requirements
 - Unrelated persons living together

Top Issues: Energy Costs

Energy intensive operations

 From Solar Energy to Petroleum Energy



Rising energy costs

Top Issues: Problems with Wildlife

- Exploding populations of Deer and Geese
 - Suburban refuges
 - Non-native species
- Crop Damage
 - \$10 million in 2009
 - 20% of vineyard grapes
 - large amounts of corn



Top Issues: Problems with Wildlife (con't)

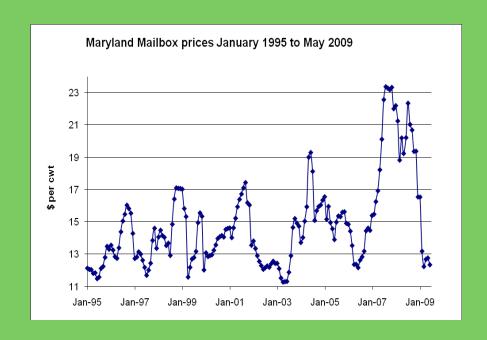
- Environmental Degradation
 - Nutrient transfer from field to waterway
 - De-vegetation of habitat
- Unhealthy population sizes
 - Disease
 - Starvation
 - Bacteria





Top Issues: Commodity Pricing

- Farmers as price takers
 - Declining share of food dollar
 - \$.20 today, as compared to\$.41 in 1950
 - Regulated prices and pricing programs
- Price volatility
 - Futures markets
 - Alternate uses



Top Issues: Commodity Pricing (con't)

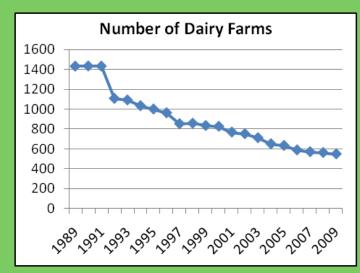
- Unpredictable input costs in Animal Agriculture
 - Futures markets
 - Demand from developing countries
 - Biofuel arrangements
 - Subsidy arrangements
- How commodity pricing issues have been addressed:
 - Govt programs
 - Borrowing

Maryland's Lost Ag Sectors

- Tobacco
 - Historical significance
 - 1930s Price supports and production quotas
 - Health problems
 - State buyout program
- Swine
 - Unpleasant smells, dust in a suburbanizing State
 - Hurt by local ordinances
 - Largely left the State

Maryland's Endangered Ag Sectors

- Horse Farms
 - Historical significance: As racing goes, horse farms go
 - Horse racing in decline in MD
 - Off-track betting
 - Competition from other gambling venues
- Dairy Farms
 - Price volatility
 - Industry consolidation



Source: Dr. Howard Leathers, University of Maryland

• 521 farms remain of the 1,432 that existed in 1990 (↓64%)

Staying in Business: Farmer Responses to Changes



Staying in Business: Diversification

- Agritourism
 - Hay rides, corn mazes, petting zoos, events
 - Balancing w/ community preferences
- Winemaking
 - 42 wineries in 15 counties, 13 under development
 - A learning curve for growers, communities
 - Zoning as agriculture
 - Regulating wine tasting events and foods served in tasting rooms
 - Use of processing byproducts

Staying in Business: Diversification (con't)

- Organic production
 - Premium prices
 - Retooling of operations, equipment, land usage
 - MDA certification
- Niche Production
 - Jams, honey, syrup, crafts, etc.
- Can require changes to infrastructure



Staying in Business: On-Farm Processing

- Adding value to gain control over pricing
 - Raw products into consumer-ready foods
 - Share of food dollar
 - Butchering, cleaning, cooking, packaging, grinding, smoking, preserving, spinning, etc.
- Accessing new markets created by development
- A return to the past

Staying in Business: Direct Marketing

- Food dollars and market share
- Direct to Consumer
 - Farmer's Markets
 - On-farm sales
 - CSAs
- Direct to Retail
 - Sales to grocers
 - Sales to restaurants
 - Farm to School



Staying in Business: Second Jobs & Ag Services

- Second Jobs
 - Support a farming habit
 - Widespread reality
- Providing Agricultural Services
 - An extensive skill set
 - Equipment repair, welding, carpentry, husbandry, plowing, harvesting, "farm-sitting"
 - Marketing skills that are unique to agriculture



Staying in Business: Controlling Energy Costs

- Limiting Energy Usage
 - Conservation tillage
 - Limiting outside inputs
- Seeking Alternate Sources
 - Anaerobic Digestion
 - Chicken litter as a heating fuel
 - Wind
- Logistics
 - Transport & Storage
 - Community Acceptance



Going Out of Business: Sale of Land

- Business viability
- Generational interest
- Debt settlement
 - Leveraged farms
 - Estate tax



- Nearly $\frac{1}{2}$ of farmland removed from production since 1970
- Vacant developments

Tools for Problem Solving



Tools: Conserving Natural Resources

- Understanding the environmental context
 - Environmental problems, actions, regulations
 - Pace and type of development
 - Factors for smart land and wildlife management
- Smart planning
 - Access to infrastructure
 - Comprehensive planning & development
 - Supportive zoning, infill development
 - Characteristic-based land development
 - Modeling & developing around existing natural and built features

Tools: Preserving Farmland

- Existing programs
 - Program Open Space
 - Rural Legacy Program
 - Maryland Environmental Trust
 - MALPF
- MALPF
 - Production agriculture
 - Implemented locally: Agricultural Preservation Districts
 - Purchases development rights
 - Coordination: Funding and flexibility

Tools: Ensuring Equity in Competition

- Environmental Regulation
 - Avoid competitive disadvantages
 - Recognize voluntary efforts
 - Farmers as partners
 - TMDL funding support
- Local Regulation
 - Clarity in intent
 - Dialogue
 - Understand implications



Tools: Managing Wildlife

- Avoid creating wildlife refuges
 - Examine publicly-owned lands
 - Retention ponds
 - Large expanses of mowed grass
 - Fenced-in areas



- Develop county-wide plans
 - Encourage the hunting of antler-less deer
 - Egg addling, controlled hunts
 - Promote wildlife management permits
 - Promote QDMAs
- DNR can help

Tools: Supporting Value-Added Operations

- Seeing farmers as entrepreneurs
 - Small businesses and community reinvestment
 - Tax base and employment
- Small business development support
 - Roles, processes, timelines
 - Agricultural marketing specialists
- State agency Ombudsmen
 - Guidance
 - Regulatory interpretation
- Potential for growth
 - A community decision



Tools: Supporting Value-Added Operations (con't)

- Facilities and logistical considerations
 - Zoning and local law
 - Consider revising definitions
 - Facilities
 - Processing facilities DHMH, MDA, or USDA
 - Wastewater discharge
 - Soil amendment to Nutrient Management Plan
 - MDE wastewater permits program
 - Composting
 - MDE <u>may</u> require a permit

Tools: Ensuring Food Safety

- Existing regulatory complexities
 - MDA
 - DHMH
 - USDA-FSIS
 - USDA-APHIS
 - FDA
 - local govts



- MDA & DHMH accommodation of on-farm processing and direct marketing
 - Training and oversight
 - Changing requirements
- When in doubt, contact agency Ombudsperson

Tools: Avoiding & Responding to Land Use Conflicts

- Close proximity & new resident expectations
- Realtor disclosure
 - Informed home purchases
 - Similar to airport disclosure
- Reverse setbacks
 - Buffer zone incorporated into development
 - Natural barriers

Tools: Avoiding & Responding to Land Use Conflicts (con't)

- Mediation
 - Mediate, don't Litigate: Private citizen disputes
 - Neutral, <u>trained</u> 3rd party
 - Reasoned solutions to conflict
 - Required by State law
- Facilitated Meetings
 - Negotiate, don't Ventilate: Public land-use decisions
 - Neutral, <u>trained</u> 3rd party
 - Collaborative development of informed policies
- MD-ACReS

Tools: Avoiding & Responding to Land Use Conflicts (con't)

- Right to Farm Laws
 - Definitions may not address value-added operations
 - Establishing and funding a local Reconciliation Board
- Comprehensive Updates
 - Zoning law
 - Agriculture law
- State law
 - Legal compliance and established operations are not nuisances
 - Mediation prior to litigation

Tools: Recognizing the Importance of MD Ag

- Economic Importance
 - Ability to compete
- Consumer demand for local foods
 - Food miles
- Food security
 - Food deserts
- Health
 - Freshness

Tools: Spreading the Word

- Outreach
 - Runs in both directions
 - Farm tours/listening sessions
 - Govt informational sessions
- Education
 - In schools
 - To the public
- MAEF
 - Ag tag
- GICA Toolkit

GICA Toolkit: Next Steps

Provide Feedback

- Editing
- GICA Approval
- Distribution

Marketing