Considerations for Beginning Farmers

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Farm Management
World Demand for Food

• Global population increases from 7 to almost 9 billion by 2040.

• The number of middle class consumers increases by 3 billion over the next 20 years.

• Demand for resources will increase exponentially . . . .

• By 2030, the world will need at least:
  • 50 percent more food
  • 45 percent more energy
  • 30 percent more water

No Ranchers Under Age 35 by 2033!

- Focus on the High Plains of the American West
- Evaluated 90 years of Census Data and projected trends
- What state will have no ranchers under age 35 by 2033?
  - Wyoming

Source: Beef Daily, Amanda Radke 12-29-14
Glick, et. al. 12/2014
Background Information

• Average age of principal operator has increased roughly one year in each census cycle since 1977. From **50.3** (1977) to **57.1** (2007) **58.3** (2012)

• Tennessee’s average age is **57.8** (2007) **59.2** (2012)

• Kentucky’s average age is **56.5** (2007) **57.6** (2012)

Source: 2007 and 2012 Census of Ag

• Tennessee Fruit and Vegetable Growers Survey
  • Average age is **61**
  • 587 respondents – 2010 Survey (M. Velandia)
Principal Farm Operators by Age

Source: 2007 and 2012 Census of Ag
Background Information

• In 2007, there were 11,878 U.S. farm operators under the age of 25 and 243,472 operators over the age of 75.
  • That’s 20.5 over 75 for every one under 25

• In 2012, 10,719 under 25 & 257,697 over 75
  • That’s 24.0 over 75 for every one under 25

Source: 2007 and 2012 Census of Ag
Over the next decade half of the farmers will retire and will be replaced by beginning farmers (Katchova, 2010)

70% of farm ground will change hands by 2025 (Kohl, 2010)

What additional factors have influenced the rate of farmland changing ownership?
Farmland accounts for up to 85% of a farmer's assets.
• 70% of farm ground will change hands by 2025 (Kohl, 2010)
• 2007 / 2012 Ag Census value of farmland, buildings, machinery *

<table>
<thead>
<tr>
<th></th>
<th>* 2007/2012 Value Billion $</th>
<th>70% of Total Billion $</th>
<th>Per Year Billion $</th>
<th>Per Day Million $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tennessee</td>
<td>41.725</td>
<td>29.208</td>
<td>1.95</td>
<td>5.33</td>
</tr>
<tr>
<td></td>
<td>43.461</td>
<td>30.423</td>
<td>2.03</td>
<td>5.56</td>
</tr>
</tbody>
</table>
“If agriculture was a high return industry, more than two percent of our nation’s population would be engaged in it.”

Peter Callan, Extension Agent
Farm Business Management
Virginia
Percent of Farms with Sales of Less than $10,000: 2012

2012 Census of Agriculture
Net Cash Farm Income of Operation
Average Per Farm: 2012

2012 Census of Agriculture
Center of U.S. Population

Mean Center of Population for the United States: 1790 to 2010
Population change by counties, United States and Tennessee

U.S. 2000-2010

- Increase: 65%
- Decrease: 35%

Tennessee 2000-2010

- Increase: 8%
- Decrease: 92%
Population change by counties, United States 2000 - 2010

Source: U.S. Census Bureau, 2010 Census and Census 2000
“I firmly believe that adhering to tradition is the greatest obstacle to production agriculture.”

James A. Bennett
Sunbelt Farmer of the Year for Virginia

Owns Three Breeds of Cattle, 900 head, Farms 2500 acres
Traditions of American Agriculture

• Agriculture has historically been tied to traditions.
  • 5th generation farm, The Home Place, etc.
• Produce an abundant, wholesome, cheap food supply.
• Americans expect to spend very little of their disposable income on food (yet want the food to be safe).
• Government programs have helped maintain cheap food.
## Sixty Years of Change...

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumer:Farmer</th>
<th>Disposable Income (billion)</th>
<th>Income Spent on Food (billion)</th>
<th>Percent of Income Spent on Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td>19</td>
<td>$76.8</td>
<td>$15.9</td>
<td>20.7%</td>
</tr>
<tr>
<td>1950</td>
<td>27</td>
<td>$210.1</td>
<td>$43.3</td>
<td>20.6%</td>
</tr>
<tr>
<td>1960</td>
<td>46</td>
<td>$365.4</td>
<td>$64.0</td>
<td>17.5%</td>
</tr>
<tr>
<td>1970</td>
<td>73</td>
<td>$735.7</td>
<td>$102.0</td>
<td>13.9%</td>
</tr>
<tr>
<td>1980</td>
<td>115</td>
<td>$2,009.0</td>
<td>$266.0</td>
<td>13.2%</td>
</tr>
<tr>
<td>1990</td>
<td>129</td>
<td>$4,285.8</td>
<td>$477.1</td>
<td>11.1%</td>
</tr>
<tr>
<td>2000</td>
<td>139</td>
<td>$7,194.0</td>
<td>$711.4</td>
<td>9.9%</td>
</tr>
<tr>
<td>2010</td>
<td>155</td>
<td>$10,923.6</td>
<td>$1,034.6</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

Source: USDA, Economic Research Service Analysis of U.S. Department of Commerce, Bureau of Economic Analysis Data
Are traditions changing?

- The American farmer has been focused on producing wholesale ag products for processors.
  - “buy retail . . . sell wholesale”
- Americans are now asking more questions about where and how their food is produced, but really do not understand production agriculture.
- Businesses look for profit margins.
  - Where does the profit margin lie for agriculture?
Evaluating Transitions or New Enterprises (Six Basic Questions)

• What are your plans?
  • Short term, long term

• What are your goals?
  • Family, life style, business and financial
Goals

- 80% of Americans have no goals
- 16% have goals in their mind but never write down
- 4% write them down and make 9x more money

Source: Business Planning Lite, Dr. David Kohl, Virginia Tech

- Short term vs. Long term
- Family, Lifestyle, Business, and Financial
- Everyone contributes (communication)
Family Goals and Plans
Evaluating Transitions or New Enterprises  
(Six Basic Questions)

- What investments (capital) will be required?
  - Land, machinery, buildings, breeding stock
- Source(s) of capital
- Avoid KTs
Just purchased our dream home and 20 acres in the country!

Farm/country living is the life for me!

Now I need a new . . .

Killer Toy
Just purchased our dream home and 15 acres in the country!

I’ve always dreamed of being a cowboy/cowgirl!

Now we need a new ...
Evaluating Transitions or New Enterprises (Six Basic Questions)

- How much net income will be needed (anticipated)?
- How much labor is available?
  - Amount required
- How do you plan to market the product(s) or change the marketing plan?

Resource: University of Kentucky Primer for Selecting New Enterprises
What plan do I follow to begin farming?

• One plan does not fit all in agriculture and farming, never has and never will.

• Every farm and every farmer is different
  • Resources, goals, lifestyles

• What works for one may or may not work for others.
Top Eleven Pitfalls in Farming

• Not knowing your Cost of Production (COP).
• Jumping on the latest/newest/hottest enterprise.
• Lack of a clearly defined business plan.
• Inadequate financial recordkeeping.
• Lack of financial reserves.
• Not managing family living expenses.
• Lack of communication.
• Following your neighbor.
• Avoiding or deferring taxes.
• Not training the next generation.
• No plan for transferring the farm to the next generation.

Bill Whittle, Extension Agent
Farm Business Mgmt., Virginia Tech
Self Assessment for Beginning Farmers

• List of Questions to Consider
  • Personal Attributes
  • Resources
  • Marketing
  • Production
  • Financial

• What are your sources of information?
Sources of information . . . .

It must be productive and valuable land! They used to grow corn here years ago!
Fig. 41.—Over two-thirds of the corn acreage of the world is in the United States, nearly all east of the line of 8 inches mean summer rainfall and south of the line of 66 degrees mean summer temperature. Nearly 90 per cent of the acreage of corn for grain in the United States is in the corn belt, the corn and winter wheat region and the cotton belt. In these three regions corn constitutes about one-third of the acreage of all crops. In the corn belt it is dominant, contributing nearly two-fifths of the acreage and half of the value of all crops. (U. S. Dept. Agr. Yearbook, 1921).
Self Assessment for Beginning Farmers (Example Questions)

• Why do you want to farm?
• How much land do you have / want / need?
• Have you developed a preliminary budget or business plan?
  • Sources, Verified for Accuracy
• How much income do you need / want to generate from the farm?
  • Or . . . how much other income can you afford to contribute to the farming enterprise?
• Have you identified sources of potential production risks?
Farm Definition

• United States Department of Agriculture (USDA)
• Internal Revenue Service (IRS)
• Tennessee Sales Tax
• Green Belt Property Tax Designation
• Deed Restrictions
  • The Land Trust of Tennessee
• County Specific Zoning Laws
USDA Farm Definition

- Any place producing $1,000 worth of products in one year.
- Farm could be as small as a greenhouse in the backyard, 4 acres of soybeans, or two beef cows.
- Size and scope depends on commodity prices at a particular time.
IRS Farm Definition

• Business of farming exists if one cultivates, operates, or manages a farm for profit either as an owner or tenant.
• Farm includes livestock, dairy, poultry, fish and truck farms.
• Also, plantations, nurseries, ranches, ranges, and orchards.
• Must complete Schedule F (Form 1040)
  • Attempting to make a profit.
• Resource: Farmers Tax Guide (IRS Publication 225)
IRS . . . Not-for-Profit Farming

• If one does not farm for profit, then income is reported on line 21 of Form 1040 and expenses can be listed as an itemized deduction on Schedule A

• Limit on the amount of deductions allowed
Tennessee Agriculture Sales Tax Exemption

• To qualify for sales tax exemption
  • Farmer, nursery operator or timer harvester must present proof of exemption by providing copy of Tennessee Agricultural Sales and Use Tax Certificate of Exemption
• Issued by Tennessee Department of Revenue
• Resources: Tennessee Sales and Use Tax Guide
  • See page 5 for qualifications
Tennessee Greenbelt Law

- Allows certain land to have property taxes assessed on its value based on present used instead of market value
  - Agricultural Land
  - Forest Land
  - Open Space Land – for public recreation
- Apply through county Assessor of Property by March 1st of the initial year seeking Greenbelt status
- Assessor of Property makes the determination
Agricultural Land
(Greenbelt Definition)

• Land which is part of a farm “engaged in the production or growing of products”
• Minimum of 15 acres
• Should normally produce average annual gross farm income of a least $1,500
Forest Land
(Greenbelt Definition)

• 15 acres or more used in growing of trees “under a sound program of sustained yield management” or with an amount and quality of tree growth which is managed like a forest
• Forest land does not have to produce a specific annual income to be considered
Deed Restrictions

• Restrictions placed within a deed that control the use of the property
• Restrictions travel with the deed, and generally can’t be removed by new owners
• May prohibit specified crops or livestock or certain other uses such as retail sales
• “The Land Trust of Tennessee”
Zoning

- Counties may have zoning laws that restrict or prohibit enterprises considered not to be traditional agriculture
  - Greenhouses
  - Agri-tainment
- Cities may have zoning laws that restrict the number and type of animals or poultry that can be on the property
The Learning Curve

“In times of change, the learners will inherit the Earth, while the knowers will find themselves beautifully prepared for a world that no longer exists!”

Eric Hoffer
American Philosopher and Writer
The Learning Curve

• In accepting the challenge of producing and marketing crops or livestock, one should recognize that the learning process is not instantaneous
• Challenges will arise during the process
• Failures are more likely in the start-up years
The learning curve . . . .

I’m going to farm just like my grandparents!!

Get all the help you can! Agriculture production and management may have a low heritability coefficient!!
The Learning Curve

“Failure is the opportunity to begin again more intelligently.”

Henry Ford

“Failures are part of life. If you don’t fail, you don’t learn. If you don’t learn, you’ll never change.”

Anonymous
Background Information: Data Sources

- Economic Considerations for Small Farm Enterprises, John Campbell, UT Extension
- US Census Bureau
- Dr. David Kohl, professor emeritus, Va Tech University
- Dr. Steve Isaacs, UK Ag Economics
- USDA Ag Resource Management Survey
  - Analysis by Ani Katchova, UK Ag Economics