

Things to Consider When Looking at Alternative Row Crops

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Producer interest in alternative enterprises often increases during periods of low farm income resulting from low prices, poor production or increasing risk environment. Row crops in particular have seen increased volatility in both prices and yields the last ten years. Producers may consider other row crops in hopes of better returns or reducing risk. Farm operations may look at alternative enterprises because of increased competition, loss of local markets, policy changes that affect profitability or lower the barriers of market entry, expansion of the farming operation, enterprise diversification, improving cash flow, or bringing new partner or family member into the operation.

Some examples of alternative row crops in the South that have received interest in the last decade include canola, grain sorghum, peanuts, sesame, sweet potatoes, and sunflowers. Research has been conducted on alternative crops for bioenergy production due to interest in cellulosic ethanol and biodiesel driven by the renewable fuels mandates. Research on crops like *camelina*, *miscanthus*, sugarcane, sweet sorghum, and switchgrass can be found

around the South in hopes of developing a market. Interest in hemp production is increasing as some states are allowing production for research following the 2014 farm bill. If and when consumer preferences shift for natural fiber from renewable sources, crops like hemp might become a profitable alternative.

Organic production of row crops is another alternative that farmers may look at adding to or transitioning their operation. Medium to small scale farms may look at organics due to barriers in achieving larger scale of production in conventional row crops. Local demand may encourage looking at transitioning to organic production as niche market. The demand for organic feedstuffs and oilseeds will increase with increases organic meat and milk production. Organic grains and oilseeds for food use are alternatives that may have potential.

A comprehensive risk assessment is necessary to identify and manage the risk exposure of operating your business. While adding a new enterprise sounds good, producers often miss the “unintended consequences.” Risk



Figure 1. Five Areas of Business Risk.

assessments identify the risk in each area of the business and determine if the business can manage the associated risk successfully. The assessment should cover five areas of business risk – Production, Market, Financial, Legal, and People (Figure 1). Answer yes or no to the following questions. Review your answers with your business team, family and employees. You may identify some risk exposure.

Production: Do you have:

- ___ 1. Management capability to produce the new and existing products?
- ___ 2. Fertility or pest protection or rotational restrictions that conflict with any products?
- ___ 3. Access to equipment necessary for producing the products?
- ___ 4. Crop or livestock insurance available in the event of loss?

Market: Do you have:

- ___ 5. Knowledge of all marketing opportunities for each product?
- ___ 6. Profitable forward pricing options for products?
- ___ 7. Revenue insurance to manage risk of forward pricing?
- ___ 8. A *written* marketing plan that coordinates with your financial and production plans?

Financial: Have you:

- ___ 9. Developed a *written* business plan that includes:
 - a. A most likely scenario for the new enterprise and whole business?
 - b. A worst case scenario for the business and its financial sustainability?
- ___ 10. Determined the cost of production for each enterprise?
- ___ 11. Calculated the break-even market prices for various production levels?
- ___ 12. Evaluated the important financial ratios historically and projected?
 - a. Profitability
 - b. Financial Efficiency
 - c. Debt Repayment Capacity
 - d. Liquidity
 - e. Solvency
- ___ 13. Reviewed your financial situation with a business advisor, lender and accountant?

Legal: Have you:

- ___ 14. Reviewed and understood the provisions of all contracts, leases, and loans?
- ___ 15. Reviewed the business exposure to liability arising from
 - a. Direct marketing?
 - b. Public admittance to your property?
 - c. Environmental & crop protection issues?
 - d. Water use regulations?
 - e. Land use issues with neighbors?
- ___ 16. Evaluated different business entity structures?
- ___ 17. Developed a good working relationship with an attorney and accountant?
- ___ 18. Maintained compliance with government regulations such as:
 - f. Worker protection?
 - g. Pesticide use records?
 - h. Truck and vehicle registrations?
 - i. Safety inspections

People: Have you:

- ___ 19. Conveyed the goals and objectives of the business with
 - f. Business management team?
 - g. All family members?
 - h. All employees?
 - i. Your attorney, accountant, and lender?
- ___ 20. Confirmed that everyone on your team is employed to the full extent of their education, training and experience?
- ___ 21. Evaluated your risk exposure to employee accidents and dishonesty?

What other risks can you identify?

Risk Assessment Example

Suppose you were considering adding Grain Sorghum as an alternative row crop enterprise. How would you assess the risk?

Production: Do you have:

- 1) **Yes** – Management capability to produce the new and existing products?
- 2) **No** – Fertility or pest protection or rotational restrictions that conflict with any products?

- 3) **Yes Growing Corn/Sb Now** – Access to equipment necessary for producing the products?
- 4) **Yes, But No Production History** – Crop or livestock insurance available in the event of loss?

Market: Do you have:

- 5) **Yes, But Basis Is Not Good** – Knowledge of all marketing opportunities for each product?
- 6) **No, Limited Market** – Profitable forward pricing options for products?
- 7) **Yes, But Low Aph For Ci Purposes** – Revenue insurance to manage risk of forward pricing?
- 8) **No, Have Not Compiled** – A written marketing plan that coordinates with your financial and production plans?

Financial: Have you:

- 9) **No** – Developed a *written* business plan that includes:
 - a. **No** – A most likely scenario for the new enterprise and whole business?
 - b. **No** – A worst case scenario for the business and its financial sustainability?
- 10) **Yes, University Budget** – Determined the cost of production for each enterprise?
- 11) **Yes, Based On University Budgets** – Calculated the break-even market prices for various production levels?
- 12) **No, Rely On Bank To Determine** – Evaluated the important financial ratios historically and projected?
 - j. Profitability
 - k. Financial Efficiency
 - l. Debt Repayment Capacity
 - m. Liquidity
 - n. Solvency
- 13) **No, Accountant Reviewed Tax Situation** – Reviewed your financial situation with a business advisor, lender and accountant?

Legal: Have you:

- 14) **No, Contract Not Available** – Reviewed and understood the provisions of all contracts, leases, and loans?
- 15) **No** – Reviewed the business exposure to liability arising from:
 - j. Direct marketing?
 - k. Public admittance to your property?

- l. Environmental & crop protection issues?
- m. Water use regulations?
- n. Land use issues with neighbors?

- 16) **Not Applicable** – Evaluated different business entity structures?
- 17) **No** – Developed a good working relationship with an attorney and accountant?
- 18) **No, Don't Think Applicable** – Maintained compliance with government regulations such as:
 - o. Worker protection?
 - p. Pesticide use records?
 - q. Truck and vehicle registrations?
 - r. Safety inspections

People: Have you:

- 19) **No** – Conveyed the goals and objectives of the business with
 - o. Business management team?
 - p. All family members?
 - q. All employees?
 - r. Your attorney, accountant, and lender?
- 20) **No** – Confirmed that everyone on your team is employed to the full extent of their education, training and experience?
- 21) **No** – Evaluated your risk exposure to employee accidents and dishonesty?

What other risks can you identify?

1. **Have Not Identified Marketing Options**
2. **Do Not Know What “Variety” To Plant**
3. **Have Not Discussed With Crop Insurance Agent.**

Based on the risk assessment shown above, should the producer add *Grain Sorghum* to their crop mix? NO. They have several risks that need to be addressed before diversifying their operation. Even if they do not add *Grain Sorghum*, they should develop a business plan for the business that addresses all of the risk facing the business.

Reference:

Crane, Laurence, Gene Gantz, Steve Isaacs, Doug Jose, and Rod Sharp. Introduction to Risk Management. USDA NIFA Extension Risk Management Education and Risk Management Agency. Second Edition, 2013.