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Poultry House Depreciation Tool

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Abstract: This article describes a poultry house depreciation decision tool designed for use by Extension educators, accountants, lenders, and contract poultry growers. The majority of production and marketing decisions are made by the vertically integrated firm, but the contract poultry grower has three options for depreciation expenses related to construction of the poultry house, which can improve cash flow. The software tool described here allows contract poultry growers to estimate changes in taxable income arising from contract poultry production from each option the Internal Revenue Service provides for single-purpose agriculture structures. It is available to interested users in a Microsoft Excel spreadsheet.

Introduction

The fully integrated nature of the U.S. broiler chicken industry leaves the contract grower with few production and marketing decisions to be made by the individual. Bailey, Bastian, Menkhaus, and Glover (1995) state that Extension educators should continue their efforts in informing contract growers about the advantages and disadvantages of contract poultry production. One of those disadvantages is that revenues are largely fixed, even when accounting for incentive pay, while production expenses are not. While vertically integrated firms provide technical assistance to their contract growers (Hess & Eckman, 2002), this assistance is focused more on production as opposed to financial or economic assistance.

The large investment in houses and equipment needed for contract poultry production can contribute to financial stress with a largely fixed stream of revenues and variable production expenses. This financial stress can increase when allowable tax deductions for depreciation are exhausted at the end of the allowable cost recovery period. The Poultry House Depreciation Tool seeks to improve existing and potential contract growers' financial literacy through choosing which method to

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calculate tax depreciation on poultry houses that will place the operation under the least financial strain. It is available to Extension educators and poultry contract growers in a Microsoft Excel 2003 spreadsheet with an accompanying fact sheet on tax depreciation.

The downloadable spreadsheet decision-making tool allows contract growers, their lenders, and accountants the opportunity to be more informed about the advantages of potential tax depreciation strategies on cash flows arising from broiler chicken operations. Extension educators benefit from the opportunity for "interactive and hands-on learning for producers at teachable moments" (Raper, DeVuyst, & Doye, 2010). The ability to help decision makers in developing pro forma financial statements that measure profitability, liquidity, and changes in taxable income are areas where Extension specialists can provide assistance (Holcomb & Muske, 2000).

This decision tool has three primary benefits:

- 1. Users are able to enter assumptions about the building costs for a poultry house and see the repayment schedule for both principal and interest.
- 2. Individuals are also able to view the amount of taxable depreciation in a given year under different methods of depreciation and the number of years that depreciation occurs.
- 3. Users are also able to see how change in taxable income arising from broiler production is altered given different assumptions about revenues, costs, and depreciation methods.

Procedures

There are two worksheets in the file. The first worksheet allows individuals to enter information on the:

- 1. Cost to build the house (excluding integrator-specific equipment),
- 2. Information pertaining to the loan (interest rate, length of loan, percent financing/down payment),
- 3. Expected Revenue per house,
- 4. Cost of production per house, and
- 5. Expected cost inflationary percentage.

On the first worksheet, individual users are shown the expected depreciation costs per year given the assumptions above under three different depreciation strategies and a loan repayment schedule. Cells that allow for users to alter assumptions (including length of loan, cost to build the house, and expected costs and revenues) are shaded yellow. The second worksheet allows individuals to individually view the different depreciation strategies and the impact on taxable income from broiler production. Users can alter which strategy is viewed through a drop down menu box. Although taxable depreciation for a poultry house occurs for a maximum of 16 years, the spreadsheet allows

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individuals to view until year 25. An accompanying fact sheet informs users on the differences between each depreciation scenario.

Summary

Using the Poultry House Depreciation Tool, contract growers, lenders, accountants, and Extension educators are able to view the impacts upon selecting alternative depreciation methods and periods upon expected taxable income from broiler production. Contract growers are automatically placed in the 10-year General Depreciation System, which can place additional financial strain on contract growers as noncash depreciation expenses end and principal payments are on the rise.

Depreciation expenses can be extended to a 15-year recovery period under the Alternative Depreciation System, which can ease the financial strain placed on contract poultry growers if they elect to use the longer recovery period. Users should note that the tool assumes the house is placed in service mid-year leading to the first year's taxable depreciation expenses being split between the first and final year of the allowable cost recovery period. The Poultry House Depreciation Tool was developed by the Louisiana Cooperative Extension Service and is downloadable, with the accompanying fact sheet, at http://www.lsuagcenter.com/poultry.

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