Calculating Custom Rates

Farm Business Management Reports
CALCULATING CUSTOM RATES

Herbert R. Hinman

INTRODUCTION

Farmers often ask what rate they should charge for custom-hire services they provide others? To a large extent, the current market in the area determines the price received for custom work. However, it is important for the person supplying services to know if the market rate is covering the cost of operation. It is possible that an acceptable short-run venture may actually be a costly long-run venture.

COST OF OWNING AND OPERATING FARM MACHINERY

The first step in determining an acceptable custom rate is to recognize the costs involved in owning and operating farm machinery and the degree to which custom work affects these costs. The costs involved in owning and operating machinery are replacement costs, operation costs, and fixed costs.

Replacement costs are generally thought of in terms of depreciation allowances. However, if replacement cost determination is based on the original cost of the equipment, when it comes time for replacement, one is likely to find that some of the return originally regarded as return for other factors provided is needed to replace the original machine. Operators who work their own farms and also provide custom work may find it useful to think in terms that every unit of service provided on another's farm must someday be replaced by a newer machine. In determining a replacement cost basis, one should use the price of a replacement machine discounted for any technological differences that exist between the machines.

Operation costs depend directly on how much the equipment is operated annually and include repair, maintenance, fuel, lube, and operating labor. In estimating these costs, one should use the annual expenditures currently experienced. Repair and maintenance should include a charge for any owner-operator labor supplied in doing repair and maintenance work.

Fixed costs occur regardless of the amount a machine is used during any one year and include property tax, insurance, interest, housing,

and shop costs. Interest cost is calculated on the average investment tied up in the current machine over its expected useful life.

Which of the above costs should be included in the calculation of an acceptable custom rate depend to some degree upon the situation the supplier of the service finds himself. If custom work is an essential part of a person's overall business, all costs involved in owning and operating machinery should be included when calculating an acceptable custom rate. If, however, a person does custom work only on "special" occasions, and does not depend on this work as a part of his overall business, certain costs of machinery ownership may not need be included when calculating an acceptable custom rate. This point will be more fully explained with examples that are to be presented.

Once the relevant equipment ownership costs are determined on a per-unit basis for each piece of equipment, the next step is to convert the unit cost basis for each item to the same unit. For example, if the unit cost basis for a tractor is calculated as to per hour and the unit cost of the item it is pulling is calculated on a per-acre basis, one of the unit cost items will need to be converted in terms of the other, depending on how the custom rate is to be calculated (on a per-hour or per-acre basis). In addition, one should also compute the amount and cost of labor used per unit and include any profit margin (for management and risks) that the operator may desire.

Worksheets have been developed to assist in determining equipment ownership and operation costs and in determining custom rates. The following examples demonstrate the use of these worksheets.

**EXAMPLE SITUATIONS**

As previously mentioned, the costs that need to be included in calculating an acceptable custom rate depend upon the situation the supplier of the service finds himself. To help clarify this point, two example situations are presented.

**Situation 1:**

Joe Custom farms his own operation and regularly plows extra acreage on a custom basis. Custom work is an essential part of his business and he wants to determine if the custom rate he has been charging is covering all costs plus providing a profit margin for his management and risk. Joe uses three pieces of equipment: a 235-horsepower 4-wheel drive tractor; a 10-bottom, 18-inch plow; and a 3/4 ton, 4-wheel drive pickup.

The tractor averages 800 hours of use per year. The current tractor cost $65,000 at the time of purchase at which time a 10% investment tax credit was claimed. At the time of trade-in, it is estimated that, in current prices, the salvage value will be $20,000. Annual property taxes, insurance, and housing costs average $400, $600, and $300, respectively. Repair and maintenance on the current tractor
have averaged $5,000 per year while fuel and lube costs have averaged $10,500 per year. To replace this tractor (minus any significant technological improvements) would cost approximately $85,000. Once newly purchased, a tractor is generally kept 10 years. Including time spent moving equipment, approximately eight acres are plowed per hour of tractor operation. Due to machinery maintenance and servicing, for every hour of tractor use, 1.2 hours of labor (or .15 hours per acre plowed) is used.

The plow is used for approximately 1,000 acres per year. It cost $14,000 at the time of purchase at which time a 10% investment tax credit was claimed. At time of trade-in, it is estimated that in current prices the salvage value will be $7,000. Annual property taxes and insurance average $80 and $120 per year, respectively. Annual repair and maintenance costs average $2,000. The plow would cost $19,000 to replace and would be kept for approximately 10 years after purchase.

The pickup is driven approximately 12,000 miles a year with an estimated 10% of the mileage related to the annual plowing activities. The pickup cost $12,000 at time of purchase, at which time a 6% investment tax credit was claimed. At time of trade-in, it is estimated that the pickup's salvage value in current prices will be $3,000. Annual property taxes, insurance, and housing costs average $200, $400, and $260, respectively. Repair and maintenance average $800 per year while annual fuel and lube costs average $1,650. To replace this pickup would cost $16,000 and, once replaced, the pickup would be kept for seven years.

For the tractor and plow, it is assumed that 10% investment tax credit is claimed at the time of purchase. It is assumed that for the pickup, 6% investment tax credit is claimed. The investment tax credit is the maximum that can be claimed on these items. It must be noted, however, that the amount of investment tax credit that an individual can actually claim will depend on his or her current income tax situation and past depreciation and trade-in policies. As shown in the worksheets, the amount of investment tax credit has a direct effect upon the rate that must be charged per unit of operation in order to cover interest and replacement costs.

The prevailing interest rate on borrowed capital is 13%. Labor costs plus benefits are $8 per hour and a profit margin of 10% for management and risk is desired.

In this situation, since custom work is a regular and essential part of the supplier's business, all costs of owning and operating the machinery need to be included in calculating an acceptable custom rate. In other words, the custom work regularly done on an annual basis is counted upon by the supplier to help cover all costs involved in owning and operating the given farm machinery.
Worksheet Analysis of Situation 1:

The three worksheets on the following pages are used to calculate per unit equipment ownership costs on each equipment item used in example situation 1. The results are the following:

<table>
<thead>
<tr>
<th>Equipment Item</th>
<th>Cost per Unit of Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>235 HP-Tractor</td>
<td>34.44/hour</td>
</tr>
<tr>
<td>10 Bottom Plow</td>
<td>4.48/acre</td>
</tr>
<tr>
<td>3/4 Ton Pickup</td>
<td>.50/mile</td>
</tr>
</tbody>
</table>

As noted, the cost of operation for each of the three items is calculated in different units. Therefore, before one can calculate a per-acre custom rate for plowing, tractor costs per hour and pickup costs per mile need to be converted to a cost per acre. This can be done by a series of simple calculations. For the tractor, one hour of operation time is required to plow eight acres of land. Therefore:

1. Cost per hour of tractor operation: $34.44
2. Acres plowed per hour of tractor operation: 8.00
3. Tractor cost per acre plowed (1 \times 2): $4.31

For the pickup, 10% of its total operation time (or 1,200 miles) is allocated to annual plowing activities. Therefore:

1. Cost per mile of pickup use: $ .50
2. Miles of use assigned to plowing activities: 1,200
3. Annual pickup cost for plowing (1 \times 2): $600
4. Acres plowed per year: 1,000
5. Pickup cost per acre plowed (3 \div 4): $ .60

The worksheet on page 8 is used to calculate the custom rate. Referring to this worksheet for situation 1, if Joe Custom is to cover all his costs plus receive $8 per hour for labor and receive a 10% profit for management and risk, he must receive $11.65 per acre plowed. Any amount less than that means he is not getting his desired profit margin and/or not covering all costs.
COST OF EQUIPMENT OWNERSHIP WORKSHEET

Equipment Item: 235 HP 4WD Tractor (Situation 1)

1. Units (Hrs., acres, miles, etc.) of Annual Use: 800
2. Price Paid for the Equipment Item Currently Owned: $65,000
3. Amount of Investment Tax Credit Claimed on Item 2: $6,500
4. Replacement Value of Equipment Item (in today's prices): $85,000
5. Amount of Investment Tax Credit That Would be Claimed on Item 4: $8,500
6. Average Number of Years the Equipment Item is Kept Before Being Traded: 10
7. Expected Value of Equipment Item at Time of Trade (in today's prices): $20,000
8. Annual Replacement Cost [(Item 4 - Item 5 - Item 7) ÷ Item 6]: $5,150
9. Average Annual Interest Cost [((Item 2 - Item 3 + Item 7) ÷ 2) x 13%]: $5,103
10. Average Annual Property Tax: $400
11. Average Annual Insurance Cost: $100
12. Annual Housing and Shop Cost: $300
13. Annual Repair and Maintenance Cost: $5,000
14. Annual Fuel and Lube Cost: $10,500
15. Annual Cost of Equipment Ownership (Sum Item 8 through Item 14): $27,553
16. Unit Cost of Equipment Ownership (Item 15 ÷ Item 1): $34.04/ae.
COST OF EQUIPMENT OWNERSHIP WORKSHEET

Equipment Item: 10-Bottom Plow (Situation 1)

1. Units (hrs., acres, miles, etc.) of Annual Use: 1,000

2. Price Paid for the Equipment Item Currently Owned: $14,000

3. Amount of Investment Tax Credit Claimed on Item 2: $1,400

4. Replacement Value of Equipment Item (in today's prices): $19,000

5. Amount of Investment Tax Credit That Would be Claimed on Item 4: $1,900

6. Average Number of Years the Equipment Item is Kept Before Being Traded: 10

7. Expected Value of Equipment Item at Time of Trade (in today's prices): $7,000

8. Annual Replacement Cost \([\text{Item 4} - \text{Item 5} - \text{Item 7}] + \text{Item 6}]\): $1,010

9. Average Annual Interest Cost \([(\text{Item 2} - \text{Item 3} + \text{Item 7}) \div 2) \times \frac{13}{100\%}]\): $1,274

10. Average Annual Property Tax: $80

11. Average Annual Insurance Cost: $120

12. Annual Housing and Shop Cost: $-

13. Annual Repair and Maintenance Cost: $2,000

14. Annual Fuel and Lube Cost: $-

15. Annual Cost of Equipment Ownership (Sum Item 8 through Item 14): $4,484

16. Unit Cost of Equipment Ownership (Item 15 \div Item 1): $4.48/ac

Use: 11,000

lcf. 000

$2,000

$10

$200

$400

$1,000

$1,400

$19,000

$1,900

$1,010

$1,274

$80

$120

$-

$2,000

$-

$4,484

$4.48/ac
**COST OF EQUIPMENT OWNERSHIP WORKSHEET**

<table>
<thead>
<tr>
<th>Equipment Item: (Situation)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Units (hrs., acres, miles, etc.) of Annual Use:</strong></td>
<td><strong>12,000</strong></td>
</tr>
<tr>
<td><strong>2. Price Paid for the Equipment Item Currently Owned:</strong></td>
<td><strong>$12,000</strong></td>
</tr>
<tr>
<td><strong>3. Amount of Investment Tax Credit Claimed on Item 2:</strong></td>
<td><strong>$720</strong></td>
</tr>
<tr>
<td><strong>4. Replacement Value of Equipment Item (in today's prices):</strong></td>
<td><strong>$16,000</strong></td>
</tr>
<tr>
<td><strong>5. Amount of Investment Tax Credit That Would be Claimed on Item 4:</strong></td>
<td><strong>$960</strong></td>
</tr>
<tr>
<td><strong>6. Average Number of Years the Equipment Item is Kept Before Being Traded:</strong></td>
<td><strong>7</strong></td>
</tr>
<tr>
<td><strong>7. Expected Value of Equipment Item at Time of Trade (in today's prices):</strong></td>
<td><strong>$3,000</strong></td>
</tr>
<tr>
<td><strong>8. Annual Replacement Cost [\left(\text{Item 4} - \text{Item 5} - \text{Item 7}\right) \div \text{Item 6}]:</strong></td>
<td><strong>$1,720</strong></td>
</tr>
<tr>
<td><strong>9. Average Annual Interest Cost [\left(\frac{\text{Item 2} - \text{Item 3} + \text{Item 7}}{2}\right) \times 13%]:</strong></td>
<td><strong>$928</strong></td>
</tr>
<tr>
<td><strong>10. Average Annual Property Tax:</strong></td>
<td><strong>$200</strong></td>
</tr>
<tr>
<td><strong>11. Average Annual Insurance Cost:</strong></td>
<td><strong>$400</strong></td>
</tr>
<tr>
<td><strong>12. Annual Housing and Shop Cost:</strong></td>
<td><strong>$2,600</strong></td>
</tr>
<tr>
<td><strong>13. Annual Repair and Maintenance Cost:</strong></td>
<td><strong>$800</strong></td>
</tr>
<tr>
<td><strong>14. Annual Fuel and Lube Cost:</strong></td>
<td><strong>$1,450</strong></td>
</tr>
<tr>
<td><strong>15. Annual Cost of Equipment Ownership (Sum Item 8 through Item 14):</strong></td>
<td><strong>$5,958</strong></td>
</tr>
<tr>
<td><strong>16. Unit Cost of Equipment Ownership (Item 15 \div Item 1):</strong></td>
<td><strong>$50/mile</strong></td>
</tr>
</tbody>
</table>
CUSTOM RATE WORKSHEET

Custom Operation: **Plowing (Situation 1)**

Unit (per hour, per acre, etc.): **Per Acre**

1. Unit Cost of Equipment Ownership:
   a. Equipment Item: **235 HP Tractor** $4.31
   b. Equipment Item: **10 - Bottom Axle** $4.48
   c. Equipment Item: **3/4 - Ton Pickup** $1.00
   d. Equipment Item:
   e. Equipment Item:
   f. Equipment Item:

   Total per-Unit Equipment Ownership Cost
   \((1a + 1b + 1c + 1d + 1e + 1f)\) $9.39

2. Labor Cost per Unit:
   a. Number of Man Hours per Unit 0.15
   b. Labor Cost per Hour: $8.00

   Total Labor Cost per Unit \((2a \times 2b)\): $1.20

3. Equipment Ownership and Labor Cost per Unit \((1 + 2)\): $10.59

4. Profit Margin per Unit: 10%

5. Profit per Unit \((3 \times 4)\): $1.06

6. Estimated Custom Rate per Unit \((3 + 5)\): $11.65
Situation 2:

John Farmer has basically the same equipment complement as Joe Custom (Situation 1) and typically uses his equipment the same amount as Joe does on an annual basis. John, however, uses his equipment entirely in his own farming operation and does not consider custom work as a part of his overall business. John's neighbor has been ill and has asked John if he would plow 240 acres for him. John desires to be fair with his neighbor as to the rate he charges for his service, but he also wants to cover all the additional costs he incurs as a result of this work plus receive a 10% profit margin for management and risk. In this type of situation, it is generally not necessary for the operator to make an allowance for fixed costs when calculating an acceptable custom rate. The fixed costs (i.e., property tax, insurance, interest, housing, and shop costs) are part of and covered by the regular operation of the business and will not be affected by this "one time" additional work. Replacement costs may or may not be included in the calculation depending upon if the operator views extra hours of machine work as decreasing the machine's life and/or value at the time of trade-in. In most situations, however, it is probably prudent to include a replacement allowance, for additional work does add wear and tear on machinery. All operation costs (i.e., repair, maintenance, fuel, lube, and operating labor) are directly affected by this additional work and should be covered by the custom rate received.

Since it would be extremely difficult to accurately predict the actual amount of additional costs to be incurred by the operator as a result of this additional work, the average per-unit costs incurred under the typical farm operation should serve as an acceptable proxy for those values included in the calculation. Therefore, in calculating an acceptable custom rate for additional work, use estimates as they relate to the typical annual overall use of the equipment.

Worksheet Analysis of Situation 2:

The three worksheets on the following pages are used to calculate per-unit equipment ownership cost on each equipment item used in providing custom plowing services in situation 2. The results are the following:

<table>
<thead>
<tr>
<th>Equipment Item</th>
<th>Cost per Unit of Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>235 HP Tractor</td>
<td>$26.44/hr.</td>
</tr>
<tr>
<td>10 Bottom Plow</td>
<td>$3.01/acre</td>
</tr>
<tr>
<td>3/4 Ton Pickup</td>
<td>$.35/mile</td>
</tr>
</tbody>
</table>
## COST OF EQUIPMENT OWNERSHIP WORKSHEET

**Equipment Item:** 235 HP, 1200 Tractor (Situation 2)

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</thead>
<tbody>
<tr>
<td>1. Units (hrs., acres, miles, etc.) of Annual Use:</td>
<td>900</td>
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<tr>
<td>2. Price Paid for the Equipment Item Currently Owned:</td>
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<td>3. Amount of Investment Tax Credit Claimed on Item 2:</td>
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<tr>
<td>4. Replacement Value of Equipment Item (in today's prices):</td>
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<td>$85,000</td>
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<td>5. Amount of Investment Tax Credit That Would be Claimed on Item 4:</td>
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<td>$8,500</td>
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<tr>
<td>6. Average Number of Years the Equipment Item is Kept Before Being Traded:</td>
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<td>7. Expected Value of Equipment Item at Time of Trade (in today's prices):</td>
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<td>$20,000</td>
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<tr>
<td>8. Annual Replacement Cost [(Item 4 - Item 5 - Item 7) ÷ Item 6]:</td>
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<td>$5,650</td>
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<tr>
<td>9. Average Annual Interest Cost [((Item 2 - Item 3 + Item 7) ÷ 2) x 13%]:</td>
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<td>10. Average Annual Property Tax:</td>
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<td>11. Average Annual Insurance Cost:</td>
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<td>12. Annual Housing and Shop Cost:</td>
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<td>13. Annual Repair and Maintenance Cost:</td>
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<td>$5,000</td>
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<tr>
<td>14. Annual Fuel and Lube Cost:</td>
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<td>$10,500</td>
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<tr>
<td>15. Annual Cost of Equipment Ownership (Sum Item 8 through Item 14):</td>
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<td>$21,150</td>
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</tbody>
</table>
COST OF EQUIPMENT OWNERSHIP
WORKSHEET

Equipment Item: 10-Bottom Plow (Situation 2)

1. Units (hrs., acres, miles, etc.) of Annual Use: 1,000

2. Price Paid for the Equipment Item Currently Owned: $_______

3. Amount of Investment Tax Credit Claimed on Item 2: $_______

4. Replacement Value of Equipment Item (in today's prices): $19,000

5. Amount of Investment Tax Credit That Would be Claimed on Item 4: $1,900

6. Average Number of Years the Equipment Item is Kept Before Being Traded: 10

7. Expected Value of Equipment Item at Time of Trade (in today's prices): $7,000

8. Annual Replacement Cost [(Item 4 - Item 5 - Item 7) ÷ Item 6] $1,010

9. Average Annual Interest Cost [((Item 2 - Item 3 + Item 7) ÷ 2) x ____%]: $_______

10. Average Annual Property Tax: $_______

11. Average Annual Insurance Cost: $_______

12. Annual Housing and Shop Cost: $_______

13. Annual Repair and Maintenance Cost: $2,000

14. Annual Fuel and Lube Cost: $_______

15. Annual Cost of Equipment Ownership (Sum Item 8 through Item 14): $3,010

16. Unit Cost of Equipment Ownership (Item 15 ÷ Item 1): $3.01/acre
COST OF EQUIPMENT OWNERSHIP WORKSHEET

Equipment Item: **Pickup (Situation 2)**

1. Units (hrs., acres, miles, etc.) of Annual Use: 12,000

2. Price Paid for the Equipment Item Currently Owned: $

3. Amount of Investment Tax Credit Claimed on Item 2: $

4. Replacement Value of Equipment Item (in today's prices): $16,000

5. Amount of Investment Tax Credit That Would be Claimed on Item 4: $960

6. Average Number of Years the Equipment Item is Kept Before Being Traded: 7

7. Expected Value of Equipment Item at Time of Trade (in today's prices): $3,000

8. Annual Replacement Cost \([(\text{Item 4} - \text{Item 5} - \text{Item 7}) \div \text{Item 6}]\): $1,720

9. Average Annual Interest Cost \([(\text{Item 2} - \text{Item 3} + \text{Item 7}) \div 2] \times \widthtext\%)]: $

10. Average Annual Property Tax: $

11. Average Annual Insurance Cost: $

12. Annual Housing and Shop Cost: $

13. Annual Repair and Maintenance Cost: $800

14. Annual Fuel and Lube Cost: $1,650

15. Annual Cost of Equipment Ownership (Sum Item 8 through Item 14): $4,170

16. Unit Cost of Equipment Ownership (Item 15 \div Item 1): $0.35/mile
As a result of deleting the fixed costs from the calculation, the per-unit costs of operation are less than in situation 1 where all costs were covered. As in situation 1, the cost of operation for each of the three equipment items is calculated in different units. Therefore, tractor costs per hour and pickup costs per mile must be converted to a cost per acre plowed basis. For the tractor, one hour of operation time is required to plow eight acres of land. Therefore:

1. Cost per hour of tractor operation: $26.44
2. Acres plowed per hour of tractor operation: 8
3. Tractor cost per acre plowed (1 \times 2): $3.31

In the case of the pickup, it is likely that it would be fairly easy to estimate the pickup mileage that will be involved in doing this work. Therefore, assuming that approximately 250 pickup miles will be used in doing this extra work:

1. Cost per mile of pickup use: .35
2. Miles assigned to the plowing activity: 250
3. Pickup cost for plowing (1 \times 2): $87.50
4. Acres plowed: 240
5. Pickup cost per acre plowed (3 \div 4): .36

The worksheet on the following page is used to calculate the minimum acceptable rate the supplier should receive. Referring to this worksheet, for situation 2, if John Farmer is to cover all additional costs he is likely to incur by doing this extra plowing plus receive $8 per hour for labor and receive a 10% profit for management and risk, he must receive $8.67 per acre plowed. Any amount less than that would mean he is not getting his desired profit margin and/or not covering all costs. Any amount above the calculated rate can be applied towards covering the fixed costs not included in the calculation.
CUSTOM RATE WORKSHEET

Custom Operation: **Plowing (Situation 2)**
Unit (per hour, per acre, etc.): **Per Acre**

1. Unit Cost of Equipment Ownership:
   a. Equipment Item: **235 H P Tractor** $3.31
   b. Equipment Item: **10 - Bottom Plow** $3.01
   c. Equipment Item: **Yd. Ton Pickup** $3.61
   d. Equipment Item: ________________________________
   e. Equipment Item: ________________________________
   f. Equipment Item: ________________________________

   Total per-Unit Equipment Ownership Cost
   
   (1a + 1b + 1c + 1d + 1e + 1f) $6.68

2. Labor Cost per Unit:
   a. Number of Man Hours per Unit
   b. Labor Cost per Hour $8.00

   Total Labor Cost per Unit (2a x 2b) $1.20

3. Equipment Ownership and Labor Cost per Unit (1 + 2) $7.88

4. Profit Margin per Unit: 10%

5. Profit per Unit (3 x 4): $0.79

6. Estimated Custom Rate per Unit (3 + 5): $8.67
SUMMARY

The rate a supplier of custom services needs to receive to cover cost plus receive a desired profit margin will vary as to the size of equipment used, equipment life, total annual use of equipment, if replacements are made with new or used machinery, cost of labor, the desired profit margin, and the situation facing the operator. If the operator depends upon custom work as an essential part of his business, all machinery ownership and operation costs should be included when calculating the minimum acceptable custom rate needed to remain in business over the long-run. However, if the custom work to be done is in addition to normal operations, fixed costs typically covered by the normal operation of the business need not be included in calculating the minimal acceptable custom rate.

If a supplier of custom services receives less than the calculated rate, the profit margin is being reduced and/or additional costs of equipment ownership must be covered by other sources. However, in a situation where obsolescence rather than wear-out is liable to limit future usefulness of equipment, it may be economically rational to provide custom services at less than the calculated rate as long as all operating and labor costs as well as a portion of the replacement and/or fixed ownership costs are covered by the rate being received.
COST OF EQUIPMENT OWNERSHIP WORKSHEET

Equipment Item: ________________________

1. Units (hrs., acres, miles, etc.) of Annual Use: ________________________

2. Price Paid for the Equipment Item Currently Owned: $________

3. Amount of Investment Tax Credit Claimed on Item 2: $________

4. Replacement Value of Equipment Item (in today's prices): $________

5. Amount of Investment Tax Credit That Would be Claimed on Item 4: $________

6. Average Number of Years Equipment Item is Kept Before Being Traded: ________________________

7. Expected Value of Equipment Item at Time of Trade (in today's prices): $________

8. Annual Replacement Cost \([(\text{Item 4} - \text{Item 5} - \text{Item 7}) ÷ \text{Item 6}]\) $________

9. Average Annual Interest Cost \[((\text{Item 2} - \text{Item 3} + \text{Item 7}) ÷ 2) × \text{_____}\%\]: $________

10. Average Annual Property Tax: $________

11. Average Annual Insurance Cost: $________

12. Annual Housing and Shop Cost: $________

13. Annual Repair and Maintenance Cost: $________

14. Annual Fuel and Lube Cost: $________

15. Annual Cost of Equipment Ownership (Sum Item 8 through Item 14): $________

16. Unit Cost of Equipment Ownership (Item 15 ÷ Item 1): $________
CUSTOM RATE WORKSHEET

Custom Operation: ________________________

Unit (per hour, per acre, etc.): ________________________

1. Unit Cost of Equipment Ownership:
   a. Equipment Item: ________________________ $______
   b. Equipment Item: ________________________
   c. Equipment Item: ________________________
   d. Equipment Item: ________________________
   e. Equipment Item: ________________________
   f. Equipment Item: ________________________

   Total per-Unit Equipment Ownership Cost
   (1a + 1b + 1c + 1d + 1e + 1f) $______

2. Labor Cost per Unit:
   a. Number of Man Hours per Unit _________
   b. Labor Cost per Hour: $______

   Total Labor Cost per Unit (2a x 2b): $______

3. Equipment Ownership and Labor Cost per Unit (1 + 2): $______

4. Profit Margin per Unit: __________% 

5. Profit per Unit (3 x 4): $______

6. Estimated Custom Rate per Unit (3 + 5): $______