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"Alternative Opportunities for Small Farm Operators"

Presented by Samuel/Donald At AAEA Meetings Blacksburg, Virginia August 6-9, 1978

Greetings! Mr. Comer, in his paper mentioned some of the characteristics of small farm operators. Many of those characteristics have an important bearing on the options available to small farm operators. For that reason, before I discuss "Alternative Opportunities for Small Farm Operators," let me re-emphasize some of those characteristics.

Generally, farmers, small or otherwise, are on the average 50 years old or older. We interviewed 128 small farm operators in a two parish area of Louisiana and found that nearly three-fourths of them were 55 years old or older. This indicates that opportunities available to them are somewhat limited. Further, because of this advanced age, small farm operators probably would be more interested in farm programs that provide immediate or short run opportunities or farm programs geared specifically for retired age farmers.

Another characteristic of the small farm operators that we interviewed was a low level of formal education. In fact, we found that more than three-fourths had completed less than the 9th grade. This would imply that opportunities requiring greater levels of educational training are simply, for the most part, off limits to small farm operators. Because of their low levels of formal education, small farm operators possess very few non-farm skills required to obtain and maintain a well paying job in the non-farm labor market.

The bottom line is that because of the age factor, the low level of formal

education and the lack of non-farm job skills, non-farm job opportunities available to small farm operators are mostly minimum wage jobs.

Finally, small farmers operate small acreage. In our study, we found that small farmers operated an average of 34 acres, with approximately two-fifths of that being suitable for crop production. This small acreage means that opportunities relating to the use of advanced technology and/or increased acreage, are quite limited. For small farmers, expanding their extensive grop production means buying or renting more land because they do not have very many acres of idle crop land.

Now, with the aforementioned characteristics of small farm operators serving as a set of boundaries, what alternative opportunities do small farm operators have? (Show and discuss Flow Chart.) First, they can remain or become fulltime small farm operators, with no expansion in farm size, but can make some changes in their enterprise mix in an effort to increase net returns. For example, consider an individual small farm unit, with 17 acres of vegetable land and 9 possible enterprises to choose from; Hogs, Fall Cabbage, Spring Cabbage, Squash, Hot Peppers, Processed Okra, Fresh Okra, Tomatoes, and Fresh Irish Potatoes. Using base prices and average yields to obtain costs and return estimates, we can change the enterprise mix and determine the impact on netreturns. (Discuss Table 1.)

A second alternative opportunity for small farm operators is to remain or become full-time farmers, but expand their operations by borrowing more capital for the purchase of land, equipment and other productive resources. For example, Stewart, Hall, and Smith in a study on "The Potential for Increasing Small Farm Incomes" found that with unrestricted borrowing, a tractor-power farm could increase its net income \$1,900 with no change in technology and an



Flow Chart: Alternative Opportunities for Small Farm Operators

Table 1. Comparisons of Returns, Enterprise Organization and Labor Used for Selected Organizations, Using Base Prices and Average Yields, for Individual Small Farm Unit

<u></u>	Enterprise Organization						
Item -	All Enterprises	No Hogs	No Okra	No Squash	No Cabbage		
-			Dollars-				
Net Returns ^{1/}	14,686	10,223	12,430	13,534	13,655		
Enterprises: -			Head				
Sows	20	0	20	20	20		
-			Acres				
Fresh Okra	1.6	2.0	0.0	1.6	1.7		
Spring Cabbage	4.0	5.0	3.8	4.0	0.0		
Fall Cabbage	3.5	6.6	2.6	3.4	0.0		
Squash	1.5	1.8	1.9	0.0	1.6		
Hot Peppers	0.0	0.0	2.7	0.0	• 0.0		
Processed Okra	0.0	0.0	0.0	0.0	0.0		
Tomatoes	0.0	0.0	0.0	1.1	0.0		
Fresh Irish Potatoes	0.0	0.0	0.0	0.0	0.7		
- Total Acres Use	ed 10.6	15.4	11.0	10.1	4.0		
-			Hours-				
Total Labor Used	2,291	1,988	2,290	2,266	1,709		

 $\frac{1}{N}$ Net returns to land, labor, capital and management.

Source: Agricultural Production Alternatives and Related Factors Affecting the Feasibility of An Agricultural Cooperative Community in South Central Louisiana, Louisiana State University, 1978. animal-power farm could increase its net income \$1,865 with no change in technology (See Table 2). Now if improved technology is used, net income on a tractor-power farm could be increased by \$3,909 and on an animal-power farm by \$3,627. These increases in net incomes could be accomplished with or without changes in the enterprise mix.

A third alternative opportunity for small farm operators is to become part-time farmers, taking either a part-time or full-time job. Many small farm operators do successfully combine farming with an off-farm job as a means of improving family income. In fact, the Census of Agriculture showed that in 1974 nearly 71 percent of the small farm operators worked 200 or more days off the farm. The impact of an off-farm job on the net returns to land, labor, capital and management can be illustrated as follows. Consider a small farm operator with 16 acres of vegetable land and one and one-half full-time labor units (one for operator; one-half for spouse). Further, assume that this small farmer chooses to produce several vegetable crops and will choose that combination that yields the greatest net returns. Based on these assumptions, if the operator worked full-time off the farm and produced 4.1 acres of vegetables, net returns would be \$9,704.00 (See Table 3). Net returns could be increased \$45.00 if the operator gave up his full-time job, worked part-time and increased vegetable production to 9.6 acres. With no off-farm employment, net returns would be \$9,770.00 if 15.2 acres of vegetables were produced. But neither of these options represent the maximum income solution for this small farm operator and his family.

Lets assume that the spouse takes a full-time off-farm job, earning the same amount of money as the operator does from his full-time off-farm job. Then, with both the operator and spouse working full-time off the farm and producing 2.4 acres of vegetables, net returns would be \$12,351.00. With only

	Net Income				
Item	Tractor	Animal Power Farm			
	Power Farm				
Observed Enterprises	\$2,662	\$1,621	_		
Existing Technology, Optimal	4,562	3,486			
Improved Technology, Optimal	6,571	5,248			

Table 2. Net Income Situations for Tractor and Animal Power Small Farms

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Source: Small Farms Feature Issue; Southern Rural Development Center, Vol. 1, No. 4, Summer 1977.

······································	Off-Farm Employment Situations							
	No Off-	Operator	Operator	Operator	Spouse			
Item	Farm	Work	Work	And Spouse	Work			
	Employ-	Part-	Full-	Work Full	Full-			
	ment	Time	Time	Time	Time			
			Dollars					
Net Returns ¹ /	9,770	9,749	9,704	12,351	12,146			
From Off-Farm Job	-0-	2,756	5,512	11,024	5,512			
From Farm	9,770	6,993	3,192	1,327	6,634			
Enterprises:			Acres					
Peas	0.0	0.0	0.0	0.0	0.0			
Spring Cabbage	4.8	3.5	2.0	0.6	3.2			
Fall Cabbage	6.8	3.5	0.4	1.1	5.4			
Hot Peppers	0.0	0.0	0.0	0.0	0.0			
Sweet Potatoes	0.0	0.0	0.0	0.0	0.0			
Processed Okra	0.0	0.0	0.0	0.0	0.0			
Fresh Okra	1.9	1.3	0.9	0.3	1.2			
Processed Irish Potatoes	0.0	0.0	0.0	0.0	0.0			
Fresh Irish Potatoes	0.0	0.0	0.0	0.2	0.8			
Tomatoes	0.0	0.0	0.0	0.0	0.0			
Squash	1.7	1.3	0.8	0.2	1.1			
Total Acres Used	15.2	9.6	4.1	2.4	11.7			
Total Labor Used	1,934	2,347	3,663	3,663	2,704			

Table 3. Comparisons of Returns Using Base Prices and Yields, Enterprise Mixes, Off-Farm Employment Situations, and Labor Use for a Representative Small

1/Net returns to land, labor, capital and management.

Source: Unpublished dissertation on Small Farm Research in Lafayette Parish, Louisiana State University, 1976. the spouse working full-time off the farm, the production of vegetables would increase to 11.7 acres and net returns would decrease to \$12,146.00. Thus, based on the highest level of net returns to land, labor, capital and management, the maximum income solution for this small farm operator would be to take a full-time job off the farm, along with his spouse, and supplement that income by producing 2.4 acres of vegetables.

A fourth, and final alternative opportunity for small farm operators that I will discuss is that the operator could leave farming, rent or sell his land and take a full-time job working for another farmer or in the non-farm sector. However, small farmers are reluctant to do this. Basil Coley, at North Carolina A&T University, found that less than 24 percent of the small farmers interviewed in three North Carolina counties would close down a farm to work in non-farm employment. He further stated that only 12 percent could muster any enthusiasm for relocating in an urban area with employment there. More than 80 percent indicated that they did not like cities and preferred country life. Our survey results supports Coley's findings.

Again, because of the aforementioned characteristics of small farm operators, along with the fact that many of them have been farming most of their lives, and can not be trained or are unwilling to be trained for non-farm jobs, they can only hope to get minimum wage paying jobs. Going back to the previous example where we assumed that both the operator and spouse work full-time, together they can earn, at minimum wage level, \$11,024.00 per year. This income, combined with income from renting out the farm or returns on investments from the money received from selling the farm, the farm family may be as well off as if they supplemented their farm income with off-farm income, that is, the aforementioned maximum income solution. In summary, we feel that the above mentioned alternative opportunities for small farm operators represent the most feasible choices. We realize that there are others, such as farming and/or working at the margin in order to qualify for food stamps and welfare payments. In closing, I want to make it understood that the above mentioned net returns, where vegetable production is involved, is applicable to certain areas of Louisiana and may or may not be applicable to other vegetable or non-vegetables producing areas.