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Structural Change Implications for Small Farms: Discussion

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Gebremedhin and Christy focus on agriculture's trend toward concentration and industrialization, and how small farms may be affected by the mostly unintended consequences of government policy. They identify a set of forces that may move smaller farmers out of agriculture, resulting in social costs both to individuals and families forced to change occupations and homes, and to their communities.

Agricultural economists and rural sociologists have a long-running concern with this issue. The decline in farm numbers was well underway by 1950, as documented in Gebremedhin and Christy's table 1. In a 1957 study, Bolton documented and examined the decline in farm numbers as part of Louisiana's low farm income problem, initially devoting attention to the number of small farms and categorization for analysis. He observed that limited resources constrain farm income and that non-farm income was an important component of family income.

The 1970s and 1980s saw a surge of interest in small farms. Gebremedhin and Christy document this interest through the better known writings of that period—particularly West; Carlin and Crecink; Lewis; Marshall and Thompson; Schertz; Tweeten; and others.

The rapid disappearance of small farms brought policy attention and resulted in program changes that will be documented later. Nevertheless, the total number of farms and, according to Gebremedhin and Christy, a disproportionate number of small

farms, has continued to decline. The authors' intent is to demonstrate the detrimental impacts of a combination of policy and technological changes on small farmers.

Who Are Small Farmers?

The authors note that problems have developed in providing a satisfactory definition of small farms, and they use this discussion to provide historical context. Development of an accurate and timely definition is difficult because of diverse and changing situations in the small farm sector. Many definitions have been proposed and used, but there remains disagreement about which is "best." Gross farm sales is an often used criterion. Less than \$40,000 in sales has been considered small, but inflation changes the relevance of a fixed number over time, and annual variations in price levels can affect the number of farms included.

Another definition is technology related—a farm is small if it cannot efficiently use common technology. A recent government definition has used a total household income criterion: A farm is small or has an income problem if income from all sources is below median income in the area, and if the farmer meets conditions concerning management and labor contributions.

Motivation or objective for farming is a key component of the small farm definition. Nationally, data about motivation are scant, but some perspective has been provided by small farmer surveys in selected states. The authors use these surveys and selected research reports as the basis for their comments. Though they are not explicit, I believe the authors use motivation to divide the population into two groups: (a) those who want to be farmers, with the operation continuing or expanding as a produc-

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tion unit, and (b) those who have a nonfarm occupation that is the dominant consideration, and for whom generation of farm income is not critical to the survival of the operation. These are not mutually exclusive groups. Most small farmers have nonfarm household income, and nonfarm income provides a very high portion of total family income on these farms.

Many farmers in the former group earn nonfarm income, but consider farming to be their occupation. Farm income is an important portion of their household income. Farmers who are small because their income is resource-limited tend to fit into this category. Various reasons are given by these farmers for remaining in farming, such as "prefer to be my own boss," "value rural heritage," "tradition," and "lack of alternative." Included in this group are farmers with insufficient household income, some of whom are full-time farmers seeking to earn a livelihood from the farm; they may or may not have sufficient resources. Also included are part-time farmers with full-time but low-paying nonfarm jobs. And there are full-time farmers with sufficient household income, who want to expand and earn a livelihood from the farm.

The second category describes a small farmer motivated by considerations other than net farm income. Many of these individuals may be hobby farmers. They sell agricultural products, but primarily live in rural areas because they want the set of goods and services provided in the rural setting. Individuals with professional careers may be found among this group of farmers; others may be retired. The farm provides a minor portion of household income.

They are in farming because it is a way of life supported from nonfarm income and tax advantages. Farms with sales of \$40,000 or less, though requiring more than \$2 of resource cost to produce a dollar of output, appear to be near economic equilibrium. . . . Their economic losses in farming have been sufficiently compensated by psychic and tax benefits to generate increasing numbers of these small farms in recent years (Tweeten, pp. 6–7).

Gebremedhin and Christy note that the contribution of nonfarm income to total household income reached 72% in 1992, and had an astounding increase to 87% in 1993. That portion would be

higher for small farmers than for the total farm population, and higher still for the rural resident category.

The authors cite recent substantial population growth in rural areas and small towns. While little of this growth is composed of additional members of the small farm sector, the trend toward this rural resident, who captures a set of goods and services in rural areas that is not available in urban areas, continues.

With these diverse situations and definition problems, I expected that the authors' next step would be a systematic analysis to indicate the number of farms by relevant subcategories—but it was not. At the national level, it is possible to sort Census of Agriculture data by broad indicators such as age, portion of income from nonfarm sources, principal occupation, and days worked off-farm annually. Such analysis of recent data would have provided better perspective for the audience.

A statement of point of view from the authors also would have been appropriate. Concern about small farms has little to do with production of food and fiber, since this group produces only 10% of total output. Small farmers whose occupation and household income are nonfarm probably need little policy attention. However, the authors appear to target small farmers with inadequate income, with limited resources, and who are inadequately educated or trained to enter the nonfarm job market. I have used some of their material (out of context) to develop what their target group might look like.

It is essential to decide whether the [public policy] concern is solely about the production of food and fiber or whether it encompasses the well-being of families living on farms and the communities in which they reside. . . . [Farmers] may lack the basic economic incentives and motivation for farming. . . . [may be] growth and goal-limited . . . [may have] few opportunities for additional farm and nonfarm earnings . . . have been—rightly or wrongly—closely identified with poverty situations. . . . Many of the off-farm jobs they hold . . . are in the secondary labor market, paying low wages commensurate with their basic educational backgrounds and practical experience.

Small farmers are described as "alienated," and as having received "little attention." They may not

want or be able to leave the land, and they may choose to minimize risk rather than to maximize profit.

With these comments on definition problems and the paper's point of view, I will focus my comments around the authors' discussions of the factors instrumental in causing problems for the small farmer.

Problems Faced by Small Farmers

Despite the heterogeneity that is emphasized, the authors discuss problems facing small farms in terms of a limited resource group. However, the different kinds of small farms are affected differently; the authors' examples illustrating specific points frequently can be contradicted by general and specific cases (provided under topic headings below). A common thread among these problem areas is avoidance of risk as a coping mechanism for small farmers. The authors discuss risk in terms of technological change, farm input prices, and credit. In these scenarios, the actions attributed to small farmers to remove risk also reduce their potential to generate income. An alternative would be to accept some risk, understanding that it must be managed. This implies internal changes in the farm business to earn a more competitive return from the resources employed.

Technology and Resource Endowment

Recently, U.S. Department of Agriculture (USDA) and university researchers have classified research with regard to beneficiaries. Most has been called scale-neutral. Some technologies are acknowledged to be inappropriate for small farmers. On commercial farms, an escalation in machinery size has enabled operators to farm additional acres, so the used machinery market has tended toward larger sizes as well. An incentive to purchase used machinery is that valuable assets may be available at substantially discounted prices. Machine size also is relative in that many farm implements are simply multiples of a basic unit hooked to a longer drawbar.

With any technology, applications must be evaluated by potential users to determine appropriateness. The discussion of technology recalls the agricultural treadmill discussion; one must con-

tinually walk faster to keep up. Those who adopt slowly gain few or none of the benefits, but adoption at some point helps avoid further losses.

Gebremedhin and Christy suggest that management errors occur on small farms. An example is inappropriately sized machinery that small farmers may feel is "forced" upon them as they take what is available in the used market—a process that drives up fixed costs. These mistakes undoubtedly occur; knowledgeable and capable management is crucial in a competitive market, so errors can be costly. It might also be noted that these problems occur on farms of all sizes, though the impact may not be as crucial on larger farms.

Farm Credit

Gebremedhin and Christy state:

[I]nterest among many small farmers to borrow for such purposes is found to be lacking, as they wish to remain debt free and have a complacent attitude toward the present pattern of farm capital investment for production purposes. Family subsistence and risk avoidance are necessarily first priority considerations for survival of small farm families.

This statement would apply to the kind of farmer I believe the authors are targeting, but surely not to all small farmers. Generally, the discussion overlooks policy and regulatory changes that have addressed some problems in this area.

Over the past two decades, small farms have been targeted for assistance in the credit area. Farmers Home Administration (FmHA) credit for land and operating capital was made more available to small farmers in the years during and following the farm crisis of the 1980s. FmHA was required to set aside a portion of repossessed land inventory for socially disadvantaged groups. In addition, repossessed land was available first to the individuals who lost the property, or their families, in an effort to preserve the family farm. FmHA, once the lender of last resort, now provides guarantees to the private sector, removing most risk and encouraging lenders to service small farms.

In Louisiana, a Small-Scale Farm Family Enhancement Project was initiated in 1988 as a cooperative project between Southern University and

FmHA (Bande, Brown, and Phills). This program provided training and technical assistance to limited-resource, minority farmers already financed by FmHA. In 1992, results were described as "encouraging." Amount of owned and leased land had increased, but little other information was provided, such as changes in net worth.

It would have been helpful if the authors had noted and evaluated such efforts to alleviate financing problems. It appears that some of their criticisms have been at least partly mitigated by more recent developments.

Market Structure and Activities

Market access can be a serious problem, perhaps one that should have been emphasized more. Marketing constraints are substantial in certain situations, and marketing firms are demanding more from the farmer. Farm management experts suggest that more gains are available to the typical producer from improved marketing than from better agro-nomic practices.

Additional change in marketing is ahead. Drabentstott (pp. 13, 19) noted: "By changing the way agriculture does business, industrialization will also bring change to public policy and agricultural institutions . . . [and] more farmers will determine their income through negotiation. . . ." He also commented that the current portions of agricultural production from vertically coordinated and identity-preserved origins (which vary by commodity) are "islands in a vast sea," suggesting that independent farmers probably will not be shut out of markets in the immediate future.

Beyond concentration of production, the ability to provide specific products demanded by consumers through biotechnology and other research suggests that

. . . the consequences of identity-preserved grains and branded products for the structure of agriculture are significant. Capital, labor, and technology are much more efficiently utilized by an industrial management system than by a cottage industry or the agricultural efforts of individual, financially autonomous units (Urban, p. 5).

These comments imply that management choices will become more important to small farmers, par-

ticularly the small farm segment that depends on farming for its livelihood. Despite these concerns, however, they do not apply to all small farmers and commodities. For example, direct marketing of produce would be unaffected by these forces.

Nonfarm Income

The ability to earn nonfarm income is a farmer-specific issue, related to basic educational background and experience. It might be argued that nonfarm income is not a problem, but a solution, since the portion of small farm family income from nonfarm sources is high. Nonfarm income simply enables operators to maintain their position in agriculture through risk management. Nonfarm employment is a diversification strategy. The inability of small farmers with weak educational backgrounds or lack of work experience to find nonfarm work is a problem, since they may be in a very vulnerable position. But small farmers who capture nonfarm jobs may come to view farm activities as the income supplement. Fluctuating farm income, then, is less a problem than is variation in nonfarm income.

Government Support Programs

Gebremedhin and Christy state that "these commodity price and support programs have the stated objectives of benefitting all farmers." Commodity program benefits are not targeted. However, the effect of a price held higher than equilibrium is to encourage overproduction. In this situation, the actions that benefit individual farmers ultimately work to their disadvantage. This is a serious problem for those small farmers who are producing program crops, and to livestock farmers who purchase feed.

There are, of course, many other government activities and policies that affect individual behavior. Large farms have more incentive to look at alternative tax scenarios, and may be organized to shelter other income with farm losses or credits. At the same time, small farmers may receive program benefits that, while not large in absolute dollars, may be a sufficient increment of income to maintain the operation—perhaps slowing the decrease in small farm numbers.

The authors also discuss program impacts on in-

centives to hold or dispose of land. While there may be strong incentives to collect land into larger units, it might also be the case that a program encourages or enables individuals to hold their land. Programs are presented as having the same impact on all small farms, rather than having a combination of impacts.

Research and Extension Programs

Gebremedhin and Christy criticize research and extension programs from the small operator viewpoint that (a) they are geared to capital-intensive, large-scale farming, with no trickle-down effect to limited-resource farmers, and (b) extension programs work with those most receptive. On the other hand, large farmers sometimes dismiss extension efforts as out of date, because of the need for extensive testing and financial constraints that prevent evaluation of some technological advances. Efforts probably lie somewhere between these extreme points.

Many researchers use innovative approaches to conduct research on the newest ideas. Extension programs have competent and dedicated agents assigned to the small farm sector, or agents who specialize in crops commonly produced on small farms. The statement of a Fresno, California, extension agent, with responsibility for the county's small farm program, might be paraphrased something like this: "I am committed to the idea that small farms have a right to exist—but not to the idea that any individual has the right to be a small farmer." I would argue that such statements of support for small farms are subscribed to by many extension agents.

Small farmer behavior depends on the specific situation. All small farmers do not rely on traditional production methods, nor do they all refuse to use credit. As a general statement, their behavior reflects their assessment of risks faced. Many small farmers use expensive hybrid seed in horticultural crops like tomatoes and bell peppers, and plastic mulch and fumigation for strawberries. The risk of not adopting must be balanced against the risks of adopting.

At the state level, many programs targeted to the support of small farms have been established. In Louisiana, for example, programs responding to the low income/difficulty of entry problem have in-

cluded (a) a Family Farm Credit Program, composed of an interest rate subsidy and a loan guarantee for land purchase; (b) a marketing project for produce growers, which consists of a collection point with refrigeration facilities and brokering service, designed to capture marketing power through volume; and (c) market news and promotion efforts such as labeling Louisiana agricultural products, bumper stickers, and others (Harper).

Also in Louisiana, Southern University operates a Small Farm Center. Extension service areas of emphasis have supported horticultural crops. Certified farmers' markets, certification of organic producers (part of a national program), and other efforts also are supported. The Louisiana case is not isolated; networks among research, extension, and state Departments of Agriculture enable ideas to travel quickly, and Louisiana's efforts may well have been copies of programs initiated elsewhere. For example, California has been a leader in certification of farmers' markets and organic producers. Support for farmers' markets through management assistance has been provided in many states (Beierlein and Connell), and states often help fund these markets.

Summary

Gebremedhin and Christy have contributed to the discussion of small farmer challenges. The paper might be strengthened by addressing the following comments/suggestions:

- (1) Heterogeneity in the small farm sector is highlighted early, but the focus shifts to the most vulnerable small farmer subset. Analysis of all segments is needed.
- (2) An analysis of strategies to reduce risk would be helpful. Risk is a strong theme in the paper. All farmers must deal with risk, through appropriate management and/or nonfarm work. Where farm income is the dominant source of household income, farm enterprises must be chosen to meet risk criteria. This suggests that programs are needed to help small farms adopt available and appropriate technologies, use farm credit to expand the resource base, and develop managerial capability.
- (3) The authors conclude that the number of small farmers will continue to decline due partly to

industrialization, and that rural areas will become an industrial and service economy. However, current programs may increase the odds of small farm survival. These impacts should be evaluated.

References

- Bandeale, O., A. Brown, and B. Phills. "Louisiana Small-Scale Family Farm Enhancement Project, Summary Report." College of Agr. and Home Econ., Southern University and A&M College, Baton Rouge, 1992.
- Beierlein, J., and C. Connell. "Managing for Success: A Manual for Roadside Markets." Dept. of Agr. Econ. and Rural Sociol., The Pennsylvania State University, University Park, 1986.
- Bolton, B. "The Low Farm Income Problem in Louisiana." DAE Circ. No. 204, Dept. of Agr. Econ., Agr. Exp. Sta., Louisiana State University, Baton Rouge, 1957.
- Drabenstott, M. "Agricultural Industrialization: Implications for Economic Development and Public Policy." *J. Agr. and Appl. Econ.* 27,1(1995):13-20.
- Harper, D. "Proposals for Assisting Entry-Level Farmers." Special study prepared for the Louisiana House of Representatives, Committee on Agriculture, 1982.
- Tweeten, L. G. "Public Policy to Restore Economic Vitality to Agriculture." Paper presented at the York Distinguished Lecture Series, Auburn University, 1985.
- Urban, T. N. "Agricultural Industrialization: It's Inevitable." *Choices* (4th Quarter 1991):4-6.