

commercial dairy farms in the traditional milk-producing States, in addition to improving cow performance, returns are found to increase significantly if the debt-to-assets ratio is lowered, and if per-cow forage and purchased feed costs are controlled.

Dairy farming is labor intensive. The increase in the minimum wage enacted in 1996 is likely to make it harder for many dairy operations to afford farm labor (Findeis, 1995). This study finds that an increase in the cost of labor in the non-traditional milk-producing areas will dramatically affect the farms' profitability levels. To these farms, reducing the amount of hired labor, while implementing production methods capable of increasing labor productivity might be a viable strategy. Since farm labor accounts for about 10 percent of all farm production expenses on dairy farms (Oliveira, 1991), it is evident that rising labor costs on farms without labor-saving technologies can be substantial.

The study provides evidence of the linkage of herd size to the profitability of the farm business, particularly for commercial dairy farms in the non-traditional milk-producing States. The incidence of large farming operations in these milk-producing States (at an average size of 370 milking cows) and the evidence from this study that points to higher net farm income resulting from continued farm expansion indicate the presence of some underlying incentives. Incentives that provide impetus for farm enlargement include production and marketing economies, management expertise, tax incentives, specialization, labor-saving equipment and timeliness in getting things done, nonfarm investment, and farm consolidation (Krause and Kyle, 1970; Stanton, 1978).

For a commercial dairy producer in the traditional milk-producing States, profitability of the farm business seems to be highly correlated with the adoption of capital- and management-intensive technologies. Dairy farms in this group have much lower adoption rates for the combined technologies, at 9 percent compared with 42 percent for farms in non-traditional milk-producing States (table 3). Efforts by policymakers to widen access to relatively inexpensive credit to allow for the purchase of costly labor-saving equipment, particularly to low-equity farms operated by young farmers, should assist commercial dairy farms in these milk-producing States to remain competitive.

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